

## CLAIMS

What is claimed is:

- 1                   1.     A method for providing traffic information concerning one or more  
2     specific sections of a route to a traveler, comprising the steps of:  
3                   generating a bundle of traffic advisory messages for the traveler when an  
4     event relevant to the traffic situation has occurred in an affected section of the highway,  
5     wherein each of the traffic advisory messages present in the bundle of traffic advisory  
6     messages describes the traffic-relevant event in question at a different time within a  
7     defined interval; and  
8                   selecting a relevant message from the bundle of traffic advisory messages  
9     which is valid at a time relevant to the traveler.
- 1                   2.     The method for providing traffic information of claim 1, wherein said  
2     step of selecting a relevant message is performed by the traveler.
- 1                   3.     The method for providing traffic information of claim 1, further  
2     comprising the step of sending the bundle of traffic advisory messages to a terminal of  
3     the traveler, wherein said step of selecting a relevant message is performed by the  
4     terminal.
- 1                   4.     The method for providing traffic information of claim 1, wherein said  
2     step of selecting comprises selecting, by a service provider, the relevant message from  
3     the bundle of traffic advisory messages which is valid at a time relevant to the traveler.

1           5.     The method for providing traffic information of claim 1, wherein  
2 each of the traffic advisory messages includes an attribute "transit time", which indicates  
3 the time which will be required to drive through the traffic event described by the  
4 message.

1           6.     The method for providing traffic information of claim 1, wherein the  
2 bundle of traffic advisory messages further include a bundle of transit time matrix  
3 information, the entries of these matrices indicating at least one of:

4                 a travel time required to drive through the traffic event described by the  
5 bundle of traffic advisory messages at the time stated in each of the traffic advisory  
6 messages;

7                 a travel time required to drive along the route in question from the starting  
8 point to a first reported event,

9                 a travel time between two reported events, and

10                a travel time between the last reported event and a destination of the  
11 traveler.

1           7.     The method for providing traffic information of claim 6, wherein the  
2 bundle of transit time matrix information has a structure corresponding to that of the  
3 bundles of traffic advisory messages, said method further comprising the step of  
4 calculating travel times on routes as sums of the travel times on free-flowing sections  
5 and the transit times through events.

1                   8.     The method for providing traffic information of claim 1, further  
2     comprising the step of using, for the selection of the relevant time for the choice of the  
3     relevant traffic message from the traffic message bundle, the access function  $n(t) = i$  if:  
4      $T_i - \frac{1}{2}\Delta t \leq t \leq T_i + \frac{1}{2}\Delta t$ .

1                   9.     The method for providing traffic information of claim 1, wherein said  
2     step of generating a bundle of traffic advisory messages includes generating traffic  
3     message bundles with future validity times.

1                   10.    The method for providing traffic information of claim 9, wherein said  
2     step of generating a bundle of traffic advisory messages includes providing the traffic  
3     advisory messages having future validity times with a value characterizing the  
4     probability of the prediction.

1                   11.    The method for providing traffic information of claim 1, wherein said  
2     step of generating a bundle of traffic advisory messages includes generating traffic  
3     message bundles with validity times in the past.

1                   12.    The method for providing traffic information of claim 1, wherein said  
2     step of selecting comprises calculating linear distances and assumed speeds for certain  
3     classes of roads to determine the time relevant to the traveler.

1                   13.    The method for providing traffic information of claim 1, wherein said  
2     traffic advisory messages relate to an overall road network of a certain size.